



ENSURING ACCESS TO QUALITY
HEALTH CARE IN CENTRAL ASIA

TECHNICAL REPORT:

'TB Can Be Eradicated' Campaign

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March 2001

Almaty, Kazakhstan



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I. Abstract

Escalating rates of TB morbidity have prompted the Government of Kazakhstan to join forces with, among others, ZdravPlus, to fight TB. As part of the fight, it is essential that the population learn to take more responsibility for their own health. The “TB Can Be Eradicated” Campaign is a ZdravPlus information campaign complementing medical and clinical work on TB in Kazakhstan. The primary audience of the campaign is teenagers between the ages of 14-18. Using a variety of mediums (newspapers, TV, radio etc.), the campaign aims to educate this target group about TB symptoms; encourage referral to a physician if signs exist; and make clear that the disease can be cured if treated correctly and in time.

The report includes a survey of a campaign already carried out in Astana, which found that following the campaign, all respondents were aware of the disease and many more than prior to the campaign understood that it was curable.

II. Executive Summary

In summer 2000, the ZdravPlus Kazakhstan Health Promotion Team (KHP) developed a comprehensive plan for launching a multi-media information, education, and communication campaign called “TB Can Be Eradicated!” to complement the medical and clinical work already undertaken to fight TB in Kazakhstan. To promote the key messages of the campaign, materials such as posters, brochures, television and radio plays were created and disseminated through various channels. Students at the local medical colleges were also an integral part of the campaign as they worked to publicize information about TB through lectures, establishing information booths and forming focus groups.

ZdravPlus specifically seeks to provide information to the public on the main symptoms of TB. It is felt that increased knowledge of symptoms could result in behavior change in the population, independent of economic situation; with potentially positive bearings on the health of the nation. The key focus areas of the campaign are as follows:

- Increasing teenagers’ knowledge of the symptoms of TB that require immediate care of a physician, and urging them to visit a physician if such symptoms are present;
- Promoting the concept that TB can be cured if treated correctly and in time; and
- Promoting free examination and treatment of TB.

KHP carried out a survey of nearly 300 teenage respondents (12-19 years) from local schools both before and after the campaign. The results from Astana were compiled into an additional report (Annex 10). This report provides analysis of the campaign based on reported answers from pre and post surveys. Some of the key findings from the campaign include:

- 100% of respondents were aware of a disease called TB.
- The majority of respondents understood that the main method of transmission of TB is through the air when coughing (85.6% before and 94.9% after the campaign). The number of respondents supposing that TB can be transmitted through shaking hands with infected persons decreased dramatically (from 52.8% to 9.6%).
- As a result of the campaign the number of respondents who reported that TB is curable increased by almost one third (66.8% before and 90.4% after).
- Understanding of the main symptoms increased. The most likely sign of TB that would force respondents to refer to health care is coughing for over three weeks – 92.4%.
- Almost a quarter of respondents (21.4% before and 19.5% after) have TB.

In both pre and post surveys, respondents (78.9% and 67.1% respectively) noticed that the main sources of available information on TB are printed materials. The second significant source of information for teenagers was relatives (63.3%). Following completion of the campaign almost half of the respondents identified with the mass media as a main source of information. Only a third of teenagers got information on TB through an FGP but there is only one FGP in Astana. In the course of the campaign the activity of health professionals improved considerably and the number of respondents who received information from them doubled (from 12.8% to 30.3%).

From the analysis it was also possible to extract several suggestions for future campaigns, the main ones being: 1) the targeted audience should be given a clearer indication of exactly where to go if they believe they are displaying signs of TB; 2) the population should be better informed about Primary Health Care (PHC) and reforms in the PHC sector in general.

III. The Campaign

A. Background and Rationale

Every year three million people die from Tuberculosis (TB) despite the fact that if properly treated, each case is virtually curable. It is estimated that between 2000 and 2020, nearly one billion people will be newly infected, 200 million people will get sick, and 70 million people will die from TB.¹ The situation in Kazakhstan is not an exception: according to government sources, the rate of morbidity in Kazakhstan increased 8.6 percent from 141 per 100,000 people in 1998 to 153.2 per 100,000 people in 2000².

Recognizing the need to address the escalating rate of TB morbidity, in 1997 the Government of Kazakhstan joined forces with USAID and their implementing partners (ZdravPlus, Project HOPE and the Center for Disease Control) to implement a variety of programs to fight TB. As part of this effort, ZdravPlus delivered office and laboratory equipment to the Central Tuberculosis Dispensaries of Astana, Almaty, Aktau, Aktubinsk, Zhezkazgan, Karaganda, Kzyl-Orda, Kustanai, Pavlodar, Petropavlovsk, Semipalatinsk, Talgar, Taraz, Taldy-Korgan, Ust-Kamenogorsk, Uralsk, and Shymkent. This equipment allows health workers to properly diagnose tuberculosis according to WHO protocols and implement the monitoring and evaluation systems critical for determining the progress and success of the treatment. To complement this activity, Project HOPE has provided extensive clinical and laboratory training to the TB Dispensaries in all the above-mentioned cities and the Center for Disease Control has custom designed a computer program for TB surveillance. It is through the work of these partners and the Government of Kazakhstan that the foundation to fight TB has been established.

In addition to strengthening the health sector's ability to clinically fight TB, it is critical that the population also takes responsibility to prevent and control TB by learning to recognize the signs and symptoms of TB and how and when to seek proper medical care. According to the Kazakhstan 1999 Demographic and Health Survey (KDHS), only a small portion of the population could identify the signs and symptoms of TB. 56 percent of women and 47 percent of men correctly identified coughing for more than three weeks as a symptom of tuberculosis. Among other symptoms, 21 percent of women and 41 percent of men cited fever, 13 percent of women and 14 percent of men cited blood in sputum, and nine percent of women and 20 percent of men cited night sweating. The percentage of the population who cited symptoms of TB that would convince them to seek medical assistance approximately follows the same pattern as of the listing of symptoms mentioned above. For example, if an individual was coughing for more than three weeks, 55 percent of women and 51 percent of men reported that they would seek medical assistance. Fever was cited in this context by 21 percent of women and 42 percent of men; 21 percent of women and 16 percent of men cited blood in sputum; and 8 percent of women and 20 percent of men cited night sweating as reasons for seeking medical assistance.

In an effort to: 1) enhance the medical and clinical work that has taken place; 2) educate the population about the signs and symptoms of TB; 3) promote the concept of seeking medical assistance when symptoms are present; and 4) create synergies between the governmental organizations, primary health care providers, dispensaries, and the community, ZdravPlus is implementing the information campaign "TB Can Be Eradicated!" jointly with the National TB Center, National Healthy Lifestyles Center, and Project HOPE. Outlined below are the key concepts of this campaign to be implemented in three cities in the year 2001.

B. Campaign Objectives

The ZdravPlus health promotion campaign "TB Can Be Eradicated!" will serve to improve responsible knowledge, attitudes, and practices of the population towards their health by empowering them with information on TB. Various communication channels will be used to disseminate the key messages of the

¹ *Kazakhstan Demographic and Health Survey*, 1999

² *Annual Statistics Report*, Draft, 2000, Agency of Health Care of RK

campaign. This is optimal, because as the population receives information from various sources, so campaign messages can be reinforced. In each pilot site the name of the campaign will be “TB Can Be Eradicated!” The campaign can also serve to contribute to the development of democratic processes in Central Asia through open dissemination of health education information and participation in the health care sector processes.

Specifically, ZdravPlus seeks to:

- Increase the knowledge of the signs and symptoms of TB;
- Promote the concept that when one notices one or more sign and/or symptom of TB they should seek medical care; and
- Inform the population that TB examinations and treatment are free of charge.

These campaign objectives were selected because an increase in knowledge of the signs and symptoms of TB can result in individuals seeking medical assistance at an earlier stage of sickness, which can improve their chances of being cured. Also, if individuals are aware that TB examinations and treatment are free of charge, they may be more inclined to seek treatment earlier as opposed to “waiting out” their symptoms in the hope that the infection is not TB related.

C. Target Audience:

According to the National TB Center, the probability of infection among contact groups of teenagers aged 14-18 (contact persons are ones who have been in contact with a person whom has active TB) is almost two times higher than among contact adults and/or children. This is confirmed by data from the National Statistics of Kazakhstan revealing that during yearly preventive examinations the number of teenagers who are found to have TB after being in contact with an active TB person is 45.9 percent. The percentage of adults who acquire TB after being in contact with an active TB person is 40.4 percent, and children is 37.4 percent.³ It has been suggested the infection rate among teenagers is high because they spend time together in rooms and on public transportation with inadequate ventilation.

Based on this ZdravPlus decided to gear the messages to two audiences:

- *The primary audience* is teenagers aged 14 – 18. Through various mediums they will be educated in the signs and symptoms of TB and how and when to seek medical assistance and treatment free of charge. In the light of current economic hardships it is particularly important that individuals are aware that TB services are free.
- *The secondary audience* includes parents of teenagers, and teachers who work with teenagers in schools, vocation schools and institutes. These categories of adults spend a lot of time with teenagers and can influence this group of young adults to make wise decisions to protect their lives and the lives around them.

D. Timing

In the first two cities, the “TB Can Be Eradicated!” information campaign will take place over six weeks and will coincide with World Anti-TB Day, which will take place on March 24, 2001. The first campaign will take place simultaneously in Astana and Almaty from March 1 to April 15. The campaign in Semipalatinsk is scheduled to take place later in 2001. Specific schedules can be found in Annex 1.

³ Statistics of SES of RK for 11 months of the year 2000

E. Campaign Implementation

The way in which this campaign will be implemented reflects the ZdravPlus goal of involving the government, NGO community and health workers in educating the population about healthy lifestyles and TB. To help disseminate the key messages of the campaign, ZdravPlus worked together with the campaign partners to develop a comprehensive implementation plan. The partners include: the Oblast/City Health Departments, Family Group Practices (FGPs), TB Dispensaries, Project HOPE, the Center for Healthy Lifestyle (CHLS), and various NGOs. Working together, these different organizations will implement the following activities:

1. The Oblast/City Health Department in each pilot site will work with CHLS and ZdravPlus to air the TB audio play six times a day on local radio stations at a discounted rate. The Oblast/City Health Departments have also helped to negotiate the airing of the audio play in bazaars, schools, supermarkets, and factories free of charge. In addition, the TB video will be aired four times a day for two months on local television at a discounted rate.
2. To help make additional literature related to TB widely available to the public, ZdravPlus has hired a well-known medical journalist to write three articles related to TB issues for each week of the campaign. Articles will be written in both Russian and Kazakh and will be published in three different newspapers (if possible). The newspaper articles and campaign materials will be made available to local FGPs to help develop them as resource centers for health information. FGP health workers will also disseminate the TB literature door to door and when counseling patients.
3. FGPs, the Oblast/City Health Departments and ZdravPlus will work together to oversee the medical students' contest in each pilot. For the contest, medical students will partner with local schools to give lectures, disseminate campaign materials, and create information booths. To evaluate their efforts, and help determine the winners of this contest a jury consisting of representatives from ZdravPlus, the Oblast/City Health Department, TB dispensaries, CHLS, Project HOPE, and the National TB Center was created. This jury will be tasked with meeting together on a bi-weekly basis to evaluate the efforts of the students (Annex 9). This competition plays a pivotal role in the campaign because it is a "peer to peer" approach that connects school-age students with medical students who are approximately the same age.

The following are campaign materials that have been developed to communicate the various messages of the "TB Can Be Eradicated" Campaign:

1. Video films: Symptoms of TB, 5 minutes, produced by ZdravPlus jointly with the cinema group "Perekrestok" (Annex 3); Effects of TB and Symptoms of TB, each 30 seconds, produced jointly by Chevron and the National TB Center. (Annex 4)
2. Audio Play: one short (30 second) audio play, which will be played on the local radio channel; as well as one 25 minute audio play that will be played in schools, bazaars, and factories. These plays were created and developed in collaboration with ZdravPlus and professional scriptwriters and actors from Almaty. (Annex 5 and Annex 6)
3. Local newspaper articles for the target audience written by a known medical journalist from Astana trained in TB issues (Annex 10).
4. Printed material for mothers prepared jointly by ZdravPlus, the National Healthy Lifestyles Center, the National TB Center, TB Dispensary, Project HOPE, pediatricians and other government counterparts (Annex 7 and Annex 8):
 - Tuberculosis
 - Leaflet on Signs and Symptoms of TB

F. Monitoring and Evaluation

The ZdravPlus Kazakhstan Health Promotion Team (KHP) will monitor and evaluate the outcomes of the “TB Can be Eradicated” Campaign.

Monitoring of the campaign will take place in the following ways:

- The ZdravPlus KHP team will make a monitoring visit to each city halfway through the campaign to observe, monitor, and recommend solutions to any problems/situations to the Oblast/City Health department, FGPs, medical students, TB dispensary, and CHLS that might have arisen during implementation of the campaign.
- Monitoring will also take place through the jury created to analyze the medical students’ contest. This group was established to provide continuous feedback to medical students on their activities related to the contest as well as to judge individual efforts in a fair and transparent manner.
- A representative of ZdravPlus will supervise the airing of video films, radio plays, and publication of newspaper articles.

In terms of evaluation, the overall campaign will be evaluated based on a pre and post-survey of the primary audience as well as a small sample of the secondary audience (Annex 10: Attachment 1). These surveys will measure changes in knowledge about TB symptoms and ways of infection and prevention. The survey will also show reported behavior including where a person would go to receive medical assistance if they suspect they have TB.

Survey results can also serve to inform the development of targeted interventions related to TB and to identify areas where health workers and/or the community could receive further training. A report providing analysis of the campaign will also be produced, which will focus primarily on the result of the campaign in Astana. Based on the campaign in Astana, assumptions for the other pilot sites will be made.

Annex 1: Geographic Implementation of the Information Campaign “TB Can Be Eradicated!”

Timeframe	Astana	Karaganda	Zhezkazgan	Ust-Kamenogorsk	Semipalatinsk	Pavlodar	Kostanai	Kokchetau	Almaty Oblast
March - April 2001	✓								✓
April - June 2001									
July - September 2001									
October - November 2001					✓				

Annex 2: ZdravPlus Video Film Script

TUBERCULOSIS

CHARACTERS:

SVETLANA

PANAGUL

VICTOR, *sick with TB*

VIKA, *his wife*

FAMILY DOCTOR

PART I

STREET CAFE.

Three young girls sitting at the table. One of them is PANAGUL

VIKA: (*boastfully and in a very feminine manner*) This set of jewelry is my husband's present to celebrate our first month of marriage! (*shows a golden ring and earrings*)

PANAGUL: (*smiling, without any envy*) Oh, very nice!

SVETLANA: (*enviously and maliciously*) You married him because of all this stuff! He is a man with a fortune!

VIKA: No, it's not true! I love him, I fell in love with him from the very moment I saw him from the first time!

(SVETLANA makes a malicious face of mistrust. At this moment VICTOR comes up to the table holding a tray in his hands)

VICTOR: (*smiling*) I'm the waiter! (*he coughs, places four cups of coffee, sits down next to VIKA*)

PANAGUL: (*with care*) You've caught cold?

VICTOR: (*coughing badly*) The devil only knows! The whole month since the wedding I haven't been able to get rid of this cough!

VIKA: (*supportively*) Even my granny's universal recipes don't work! I cannot cope with his fever! It's incredible!

VICTOR: I'm tired of this cold already. Can you imagine, I feel weak as a fly in spring, and also I have these pains, here... (*shows his chest*)

SVETLANA: (*maliciously*) So, it seems that marriage is not good for your health, darling!

Look - you have lost weight; you look pinched! Maybe your wife doesn't feed you well?

VICTOR: (*kissing his wife*) No, my wife cannot be blamed. I just don't have any appetite! (*another cough attack*) I'm sorry! (*takes a handkerchief from his pocket and goes a little aside from the table*)

VIKA: (*quietly and trustfully*) You know, Panagul, he is sweating at night so badly that his tee-shirts could be squeezed out.

(VICTOR returns to the table)

PANAGUL: (*seriously*) Look here, guys! You should go to your family doctor. It looks like Victor has got tuberculosis!

VICTOR AND VIKA: (*astonished, together*) What?!

(SVETLANA fastidiously and cautiously takes a distant position from the couple, closer to PANAGUL)

VICTOR: (*shocked*) What are you talking about, Panagul? It's impossible. (*puts his arm around VIKA and waves his hand dismissively*)

VIKA: (*scared and slightly moving away from him*) Is it contagious?

VICTOR: (*offended*) There's no TB confirmed yet, and you are already squeamish about me! (*stands up*) I'm sorry I must go...

VIKA: *(sits still for a moment, then rushes after him)* Victor, wait for me, please!
SVETLANA: *(maliciously rejoicing)* Here is the end of their idyllic family! Vika needs Victor when he is healthy and when he is able to buy her presents like that! *(points to ear rings and rings)*
PANAGUL: You know, I think that they really love each other! Money has nothing to do with it.
SVETLANA: Ha! Ha! I don't believe in love! She'll leave him, I'm sure of it!

PART II

(DIP TO BLACK)
FAMILY DOCTOR'S OFFICE. DAYTIME.

VICTOR: *(in despair)* So, I have active TB! *(cautiously)* And my wife...is she OK?
(VIKA keeping silence in a tense atmosphere)
ALMAGUL: Yes, Vika is not sick, but danger for her still exists. *(she takes toilet water spray out of her purse)* I am going to show you how TB is transmitted. *(pointing to the bottle)* Imagine that this is a sick person. When coughing *(pushes the spray button)*, sneezing, spitting and even speaking a sick person disperses TB bacilli into the air. Can you feel this perfume while you inhale it? *(VIKA and VICTOR nod their heads silently)* This is exactly how TB is transmitted. *(stands up and opens the window)* If we open the window, the smell goes away very fast. So ventilate your apartment frequently, since the risk of invasion increases in stuffy rooms, especially when contact is prolonged and close.
VICTOR: *(with nervous irony, glances at VIKA. She is looking down, tense)* So, as I understand, we must abstain from sex.
ALMAGUL: *(assessing the situation, friendly)* Do not dramatize the situation! The time when consumption was fatal is over. Medicine today can beat TB. Anyway, the score is already 1:0 to you, Victor.
VICTOR: Why, doctor?
ALMAGUL: Because you came to the doctor in time, TB is our foe, and it is afraid of the doctor.
VICTOR: *(with bitter grin)* What else is TB afraid of?
ALMAGUL: You need the DOTS therapy course - two months in hospital, followed by four months of taking tablets at home, under supervision. And you will beat TB.
(VIKA sitting with her head down, pulling nervously at her ring)
VICTOR: Two months in the hospital?! But what about my business, it will suffer tremendous losses!
ALMAGUL: *(seriously and firmly)* Without treatment TB is a deadly disease! What is more important for you: your money or your life?
VIKA: *(quietly, without any emotions)* All right, doctor. We'll follow all your advice.
VICTOR: *(with challenge to VIKA)* All right? Then you won't spend your holidays in the Bahamas, and I won't buy you a car, and we will have to give up plans. Do you agree?
VIKA: *(with tears in her eyes, passionately)* I need only you! Do you understand? I need you healthy! I love you, and money has nothing to do with it!

PART III

PARK. OPEN GRASS IN THE PARK.
THREE MONTHS LATER

(VICTOR, VIKA, SVETLANA, PANAGUL sitting on the grass and having picnic. A basket with food next to them)
SVETLANA: *(with admiration and surprise)* I thought that you would leave him...
VICTOR: *(looking at VIKA with love)* I was afraid of that too! You know, I was so depressed and was thinking of escaping from the hospital. Because of Vika we coped with the difficulties. She was very insistent.
PANAGUL: *(with indignation)* If you had escaped from the hospital, you would have destroyed not only the future for both of you, but also your own life!

VIKA: We do realize this. Thanks to God, the most difficult part is over. Victor finished his in-patient treatment a month ago.

PANAGUL: *(to VICTOR)* Are you continuing to take your pills regularly?

VIKA: Yes, of course. According to the DOTS therapy system after two months of in-patient treatment, another four months of out-patient treatment is required. I am personally taking care of giving him the pills on time.

VICTOR: *(smiling)* Oh, she is right! She feeds me, gives me my pills on time and nurses me as if I am a child!

PANAGUL: *(looks at SVETLANA)* Now, do you believe in love?

SVETLANA: *(agrees)* Yes, I do! *(sighing)* And it seems that money has nothing to do with it!

Annex 3: Chevron TB Video Films

Produced by Chevron in collaboration with the National TB Institute.

TRAILER 1

6000 Kazakhstani people died of TB in 1997.

This year it could be...

TRAILER 2

TB is one of the most dangerous diseases of the twentieth century. The most frequent form of transmission is through the air when you cough and even when you speak. TB is caused by Koch bacteria, which affect the lungs and then other organs. Learn to diagnose the signs of TB: coughing for three weeks, especially with blood; pain in the chest; loss of appetite and weight, fatigability, weakness; sweating, increasing temperature; swelling glands.

When you diagnose these symptoms seek medical help immediately!

Prevent the spread of TB!

Don't sneeze, cough or spit in public places!

Remember, the earlier TB is discovered the higher the chance of full recovery!

Annex 4: Audio Play Script

Meeting 1

AIM: ENUMERATION OF TB SYMPTOMS

CHARACTERS:

TIMUR – 17 years old

SANJAR – 17 years old

(SCENE OF ACTION – NIGHT CLUB, DANCE MUSIC IS HEARD)

TIMUR: Sanjar, salam. It is great that you have come here too. It is always cool here!

SANJAR: Salam, Tima. (*coughs slightly*)

TIMUR: Look at those girls sitting over there! Unbelievable! That girl in blue jeans is staring at you and the other one, with curly hair, seems to be looking at me!

SANJAR: The name of that girl in jeans is Asel, I have been dreaming of getting to know her for ages.

TIMUR: Then why are you sitting down? Let's go and dance! You invite Asel and I will invite her girlfriend and we will get to know each other.

SANJAR: Go, please. I will miss this dance.

TIMUR: Don't you like the music?

SANJAR: No that is not the point! I feel weak and I've got this idiotic cough that I can't shake off. I will be embarrassed if the girls notice that I get tired quickly. And when I'm dancing I cough permanently!

TIMUR: Then I will also sit out this dance with you. You know we haven't seen each other for two weeks.

SANJAR: Sit down over here and pass the ashtray and lighter to me. (*sound of lighter being lit, cough*)

TIMUR: Throw that cigarette away! You are coughing! Look, you have grown thin! Let's order your favorite cakes – éclairs and some sandwiches, you will feel refreshed and the next dance will be ours!

SANJAR: (*coughs*) Order for yourself, Timur, I don't want it. Somehow, I have no appetite.

TIMUR: (*surprised*) You do not want your favorite éclairs? That is strange! Something is wrong with you! You've turned pale, thin, you feel weak and you have lost your appetite! Maybe you are in love?

SANJAR: (*sadly*) So it would seem if it were not for this cough! And also the pain in my chest. (*coughs once again slightly*).

TIMUR: (*seriously*) Excuse me, my friend! You are probably sick and I am joking like a fool! Well, I remember three weeks ago when we were in the mountains that you coughed there too and had to stop often to take rest.

SANJAR: Yes I did get tired last time.

TIMUR: Did you go to the doctor? A high fluctuating temperature, coughing for three weeks, exhausted, loss of appetite and weight, and sweating at night ...Sanjar...

SANJAR: No I didn't. (*coughs*)

TIMUR: You must go to a physician immediately.

SANJAR: And what I will tell the physician? That I am getting tired and steaming up at night? Rubbish! What kind of disease is that!

TIMUR: It is not rubbish! Do you measure your temperature?

SANJAR: I measured it several times. But I couldn't understand anything: my temperature is either high or normal.

TIMUR: These are symptoms of TB!

SANJAR: Who's a clever doctor? You are only about to enter Medical institute! What would you know about TB?

TIMUR: My mother is a physician and we have a lot of medical literature at home. I remember a very good medical brochure on TB. Don't think that I am trying to be a doctor, but I think that you need to refer to a physician.

SANJAR: You are a panic-monger! I bought some antibiotics and have been taking them for two weeks. I hope to be healthy soon. (*coughs*)

TIMUR: You have taken antibiotics without consulting a physician for two whole weeks and you are still coughing?! Don't be angry, Sanjar, but I am your friend, I worry about you – we have been friends since the first class. Forget about self-treatment and go to a physician tomorrow!

SANJAR: (*having a fit of coughing*) Maybe you are right. I feel worse today. Tomorrow I will go to a doctor.

TIMUR: You should have gone long ago!

Meeting 2

AIM: REPETITION OF SYMPTOMS METHODS OF PROTECTION NECESSITY OF IMMEDIATE REFERRAL TO A PHYSICIAN

CHARACTERS:

TIMUR – 17 years old

MOM OF TIMUR, PHYSICIAN – 40 YEARS OLD

TIMUR: Mom, I have to talk to you!

MOM: What's wrong, Timur, why are you so excited?

TIMUR: Today I saw my friend Sanjar. Do you remember him?

MOM: Yes, of course. You were friends with him since the first class. What's up?

TIMUR: Mom, I am afraid he has caught TB.

MOM: Why do you think so?

TIMUR: Sanjar has been coughing for over three weeks, he is exhausted, has lost his appetite and is

losing weight, he sweats at night and his temperature increases periodically! He couldn't even dance!

MOM: Well, the situation is very serious. Did Sanjar refer to a physician?

TIMUR: That's just the point! He decided to treat himself – he bought some antibiotics and has been taking them for two weeks.

MOM: And the cough hasn't stopped?

TIMUR: No, and when he put his handkerchief to his lips I noticed a drop of blood. In addition he has a pain in his chest and his temperature becomes high from time to time.

MOM: I am sorry about Sanjar. You are not a doctor and not yet even a medical student, but I am afraid that your diagnosis sounds right: your friend may have the symptoms of TB.

TIMUR: This is a very dangerous disease, isn't it?

MOM: Unfortunately yes. TB is a very dangerous infectious disease that, in the case of improper treatment, can result in a patient being unable to work for a long period of time, or of becoming an invalid, and it can even lead to death.

TIMUR: Death, really?

MOM: TB is considered to be a fatal disease. (More than half of TB patients die within one year in cases of improper treatment.)

TIMUR: They die within a year?!

MOM: Yes, if a patient is not treated and moreover is not treated properly.

TIMUR: But for all that TB is curable?

MOM: TB is curable if the patient completes the full treatment of special anti-TB medicines. And it is very important not to interrupt medication even if the patient feels better after the first few days of treatment. I hope you explained to Sanjar that he has to refer to a physician immediately?

TIMUR: Yes, of course!

MOM: Right. My dear, I am worried about your friend and I am going to call his mother, Zhanna Akhmetovna, without fail. But I worry about you too.

TIMUR: About me? But I do not have these symptoms.

MOM: You are a future doctor and must know that TB is dangerous because it is an infectious disease. One pulmonary TB patient can infect 10-25 healthy people a year.

TIMUR: Does that mean that Sanjar can infect the whole class?

MOM: Unfortunately yes if not properly treated in time. Microbes spread while coughing, sneezing and even talking. If Sanjar really is sick your class should undergo a preventive examination. I ought to tell you about all the dangers of TB so that your close friends and classmates won't catch TB.

TIMUR: So, TB spreads through the air while coughing, sneezing and even talking?

MOM: Yes, a healthy person inhales microbes from the infected air. And this could happen to any of Sanjar's classmates. There is information that teenagers between the ages of 14 and 18 catch TB through contact with TB patient two times more often than elder people.

TIMUR: Maybe because we sit together in classrooms, then go for a walk somewhere to have fun and

nobody thinks of the danger of infection.

MOM: Timur, our conversation is the talk of an experienced doctor with a future doctor and also of a mother with her son. Do you understand me?

TIMUR: Yes, Mom: I understand that TB is a dangerous disease and I remember its symptoms.

MOM: You told Sanjar to refer to a physician immediately, didn't you?

TIMUR: Yes, Sanjar will go with his Mom to the polyclinic tomorrow morning.

Meeting 3

CHARACTERS:
ZHANNA AKHMETOVNA,
SANJAR'S MOM - 35 YEARS OLD
PHYSICIAN, MAN - 45 YEARS OLD

(Scene of action – physician's room. A clock strikes)

ZHANNA: How do you do, doctor.

DOCTOR: How do you do, Zhanna Akhmetovna.

ZHANNA: I am so upset, doctor. It is so unexpected! Well, does the examination show that Sanjar has TB?

DOCTOR: Unfortunately, yes. But TB is curable! It is very important to refer to a physician in time.

ZHANNA: I recently returned from a business trip and noticed at once that Sanjar had started coughing and had lost his appetite. I was anxious and suggested to him that he should go to a doctor. But he refused. You know - 17 years old is a difficult age!

DOCTOR: Yes you are right. They are neither children, who are implicitly obedient, nor reasonable adults.

ZHANNA: You are absolutely right. Sanjar doesn't like complaining. And unfortunately only yesterday he admitted that he has been coughing for over three weeks, that he is exhausted, has lost his appetite and some weight, and that he has a pain in his chest. He has to change his tee shirts because he sweats and his temperature is occasionally high! If I had known this earlier I would have brought him to you long ago!

DOCTOR: The most important thing is an examination and we've done that. Now Sanjar will be treated by special anti-TB medicines.

ZHANNA: How long is the full medication?

DOCTOR: Not less than six months, but maybe up to nine months.

ZHANNA: Six to nine months! I thought he would recover earlier!

DOCTOR: TB pathogens are very stable. That is why medication can't be interrupted on any account even if the patient feels better after the first weeks of treatment. If these rules are not adhered to, the disease will come back.

ZHANNA: Oh no, doctor! I will make sure that Sanjar does not interrupt his treatment until he is fully

recovered!

DOCTOR: The peculiarity of TB is that the disease is very difficult to cure if a patient interrupts their medication because the microbes get used to the medicines and it then becomes harder to beat them.

ZHANNA: How dangerous is this disease! And where could Sanjar have caught it!?

DOCTOR: Unfortunately, teenagers fall sick from TB two times more often than adults.

ZHANNA: Do you mean to say that TB occurs twice as often among the 14-18 age group than among adults?

DOCTOR: The growing body is more vulnerable to infections. Plus adults do not go to school or the disco in a crowd where the rooms are not always properly ventilated. Unfortunately one can become infected anywhere, even on public transport.

ZHANNA: Maybe Sanjar got infected this way.

DOCTOR: Zhanna Akhmetovna, I know that Sanjar has a teenage sister.

ZHANNA: Yes, doctor, Alma is 13.

DOCTOR: You and all your family should understand that TB is transmitted from the pulmonary TB patient through the air while coughing, sneezing and talking. A healthy person then inhales microbes in the infected air. TB transmits easier indoors than outdoors because microbes are accumulated in the closed and unventilated space and the risk of infection increases. Ventilate all your rooms regularly.

ZHANNA: I will do everything you have suggested.

DOCTOR: And your family has to go through a preventive examination too. One pulmonary TB patient who has not been treated can infect 10-25 healthy people a year. But after starting medication the likelihood of infection decreases.

ZHANNA: You are trying to be delicate with me, but I understand that TB is a fatal disease and Sanjar will complete his treatment without a single day's interruption. In addition, my family and I will have a preventive exam tomorrow.

DOCTOR: In this case there is no doubt that in nine months your son will be absolutely healthy.

Meeting 4

CHARACTERS:

SANJAR

TIMUR

ZHANNA

(Scene of action – city street, near school)

SANJAR: Salam, Timur!

TIMUR: Salam, Sanjar! You have new sport shoes?

SANJAR: Yes, I put them on for the first time. And did you get the tennis rackets for me?

TIMUR: Certainly. Here are four rackets. Two for me, and two for you.

SANJAR: Today our team will win without doubt!

TIMUR: Sanjar, maybe it will be difficult for you?

SANJAR: Forget about my difficulties, Timka! Eight months have passed and now I feel like new. I only needed six months of treatment not nine! Thank God! They were difficult but they are already behind me!

TIMUR: Well done! So much patience.

SANJAR: You are a fine fellow too, Timka!

TIMUR: Why me?

SANJAR: You, my doctor and our parents – jointly you made me realize that TB is a dangerous infectious disease with serious consequences and that if I didn't treat it seriously I wouldn't be able to study or work. It's not good to become an invalid at the beginning of your life!

TIMUR: And how are you now?

SANJAR: Like Rambo! I gave up smoking! And the windows at home are open day and night!

TIMUR: Sanjar, what are you looking at?

SANJAR: The girl I wanted to meet all that time ago is over there. I know her name is Asel.

TIMUR: Now is a very good chance – she also has tennis rackets!

SANJAR: Sorry, excuse me; are you going to the tennis-court in the park?

ASEL: Yes, I am going to play tennis (*pause*), Sanjar, right?

SANJAR (*amazed*): You know my name?!

ASEL: Sure. But I thought you would never come up to me. Let's go and play. By the way my name is Asel.

Annex 5: Audio/Radio Play

REMEMBER:

TB IS A FATAL INFECTIOUS DISEASE FOR YOU AND FOR THE WHOLE WORLD!

REMEMBER:

WITHOUT PROPER TREATMENT A TB PATIENT SUFFERS AND BECOMES THE SOURCE OF INFECTION FOR HIS RELATIVES AND FRIENDS!

REMEMBER

TB SYMPTOMS ARE: COUGHING FOR OVER THREE WEEKS; EXHAUSTION; LOSS OF APPETITE AND WEIGHT; PERIODICAL INCREASES OF TEMPERATURE; AND SWEATING AT NIGHT. IF YOU HAVE THESE SYMPTOMS GO TO A PHYSICIAN IMMEDIATELY!

REMEMBER

TB IS TOTALLY CURABLE IF TREATED CORRECTLY AND IN TIME.
EXAMINATION AND MEDICATION ARE FREE!

REMEMBER

THAT TB IS A DANGEROUS DISEASE!
IF YOU NOTICE THE FOLLOWING SYMPTOMS: COUGHING FOR THREE WEEKS;
EXHAUSTION; LOSS OF APPETITE AND WEIGHT; PERIODICAL INCREASES OF
TEMPERATURE; AND SWEATING AT NIGHT– REFER TO A PHYSICIAN IMMEDIATELY!
TB IS TOTALLY CURABLE IF TREATED CORRECTLY AND IN TIME.
EXAMINATION AND MEDICATION ARE FREE!

Annex 6: TB Booklet

TUBERCULOSIS

Represents a danger to the whole world
Your health is in your hand

What you should know about tuberculosis

Tuberculosis is a dangerous, infectious disease and if inappropriately treated can lead to a long-term incapacity for work, disability and death.

- A pulmonary tuberculosis patient who doesn't get the required treatment may contaminate between ten and 25 healthy people a year spreading microbes by coughing, sneezing and conversation.
- Tuberculosis is a deadly disease. If not treated correctly over half of all tuberculosis patients die from tuberculosis within one year.
- Today, tuberculosis has become an epidemic all over the world including in Kazakhstan, Kyrgyzstan and Uzbekistan.

What symptoms should you be aware of?

Tuberculosis mostly affects the lungs. This type of tuberculosis has the following symptoms:

- Cough lasting over three weeks that doesn't go away after treatment with the usual cough medicines and antibiotics.
- Pains in the chest.
- Mucopurulent, sometimes bloody, discharge.

Tuberculosis is also accompanied by:

- Fatigue and weakness.
- Loss of appetite.
- Weight Loss
- Periodic fever and chill.
- Sweatiness, in particular at night.

If you notice that you or your relatives have had a long lasting cough you should visit a doctor immediately.

According to the existing regulations, the examination and treatment of tuberculosis are provided free of charge.

How to protect yourself against tuberculosis

- Everyone should know that tuberculosis is transmitted from the lungs of the tuberculosis patient through the air by coughing, sneezing and conversation. A healthy person inhales microbes with the contaminated air.
- The family of a lung tuberculosis patient is under a risk of contamination of tuberculosis. Contamination often occurs in closed places, which is why you should keep your home well ventilated, in particular if somebody in the family has a cough.
- People whose immunity is weak, who don't get proper nutrition, who smoke, or are alcoholics and drug addicts are at a higher risk of tuberculosis contamination.

How to treat tuberculosis

- Tuberculosis is curable only if a patient gets a full course of treatment with special tuberculosis medicines. The course lasts no less than six months and if a patient has a serious form of the disease – up to nine months.
- Tuberculosis mycobacterium is very stable! That is why treatment should be continuous. A patient should follow all the doctor's prescriptions even if a patient feels that he/she is better after the first weeks of taking medicines!
- If treatment rules are not followed then the disease will show up again and it will be difficult to treat it!

Do not stop or interrupt treatment before it has run its course!

- As soon as a patient starts treatment the probability of people becoming contaminated by him decreases. Sputum analysis will soon show that the number of generated bacterium quickly decreases and that therefore the disease begins to decline.

Remember!

Tuberculosis is a serious and dangerous disease!

Remember tuberculosis symptoms and visit a doctor immediately if something is wrong!

If not treated correctly you will become a source for the spread of tuberculosis and will contaminate your family members!

Annex 7: TB Leaflet

TUBERCULOSIS

IF YOU NOTICE THE FOLLOWING SYMPTOMS:

- Coughing for three weeks
- Exhaustion
- Loss of appetite and weight
- Periodical increases of temperature
- Sweating at night

Refer to a health physician. Have a sputum test IMMEDIATELY!

TB is totally curable if treated correctly and in time!

Annex 8: Medical Students' Contest

The medical students' contest is being conducted as part of the "Tuberculosis Can Be Eradicated!" information campaign.

Purpose: to increase teenagers' knowledge about the key signs of TB and to instill a sense of self-control concerning this dangerous disease in that age group – "the signs have been observed – go to the doctor immediately!"

Duration of Contest March 1, 2001 through April 15, 2001.

Results will be announced on April 24, 2001.

Number of participants is 80.

Student-participants must take part in all four components of the contest. The jury will do the judging on a sliding scale. The first 15 winners will get tonometers, phonendoscopes, and medical robes. The next ten winners will get family medicine textbooks and tonometers; the next ten winners will get phonendoscopes. All the participants of the contest will receive certificates and promotional gifts. A school-winner will receive specific books for the school's library.

Components of the contest:

1. *School lectures*– using interactive educational methods the students will give lectures and classes in schools on the following topics: "TB signs" and "How to prevent TB".
2. *Information dissemination* – distribution of flyers and booklets.
3. *Information stations* – producing information displays in at least one outside facility and at one of the schools.
4. *Sports activities* – ensuring that fellow teenagers turn up for the cross-country running event on Health Day (April 7, 2001)

Each student must receive points in ALL FOUR CATEGORIES to be able to receive an award:

1. School lectures.

Students will receive special training from HLSC specialists. After which they will start to give educational lectures to high school and university students. At the end of each lecture the participants giving the lecture will pass around a piece of paper for each student to write his or her name and telephone number as having heard the lecture. The telephone number is important so that the jury can carry out random spot checks at a later date. These lists will be turned in and counted. For every ten people who attend a lecture the student will receive three points. The information should be given to the jury committee by the 16 of April. Should even one person from the list be falsified, the whole list of pupils will be annulled.

4. Information dissemination

Students will be required to distribute flyers and brochures throughout their area. The jury will determine the area for distribution for each student. In apartment buildings flyers must be stuck on front doors or near the mailboxes. In private houses materials must be pasted onto individual mailboxes. The students will provide the jury with a list of where they distributed materials and the number of materials distributed by 16 April. The monitors will then randomly choose 20 addresses and ask the tenants to verify that they saw the flyers. For each confirmed address the student will get five points. The maximum amount is 100 points.

5. Information stations

Students must produce a booth, information display, or a corner with up to date medical information on TB issues in at least one outside facility and at one of the schools. The information station must state the name of the student as well as his/her contact information including address and telephone number. Examples of an outside facility are kindergartens, factories, stores, transit stations, universities, bazaars, training halls, etc.

The students need to supply a list of these additional places to the jury by April 16. If the information stations are medically correct the student will receive two points for each information station developed. A total of 50 points may be earned.

6. Sport activities.

The goal of this part of the contest is to attract school students to the event since good ventilation is one of the primary ways to prevent TB. For each participant who comes, the student will receive one point. The number of points is unlimited. The sports event is cross-country running devoted to Health Day and will be held on April 7, 2001.

The final scores will be publicly displayed. Results of the contest will be declared on April 24, 2001. An award ceremony will be held in the Palace of school students in the city of Astana. Charts with current data and final results will also be on display there.

Information about the implementation of the contest steps must be given to the Chair of Valeology at the Medical Academy by April 15, 2001. Ask for Natalia Slivkina.

Annex 9: Newspaper Articles

Only available in hard copy.

Annex 10: Analysis of the Campaign in Astana

A. Methodology

In order to measure reported knowledge and behavior change as a result of the campaign, ZdravPlus, with the help of the Medical Academy of Astana and the City Health Department, selected six student interviewers and trained them to carry out pre and post campaign surveys.

The survey was designed to test the attitudes of respondents towards TB and their knowledge of signs and symptoms in order to ascertain the efficiency of the information sources used in the course of the campaign. The survey was developed in Uzbekistan and pre-tested on focus groups by the ZdravPlus Health Promotion Team in Astana as well as in Almaty (see Attachment 1).

To determine the sample size for the pre and post survey the Health Promotion Team used a database of all high schools in Astana. Using cluster sampling, 18 schools, colleges and vocation schools were randomly selected. Approximately 20 pupils were interviewed from each school in classes 8-11. Interviews took place simultaneously for three days in March before the campaign, and again in April after the campaign.

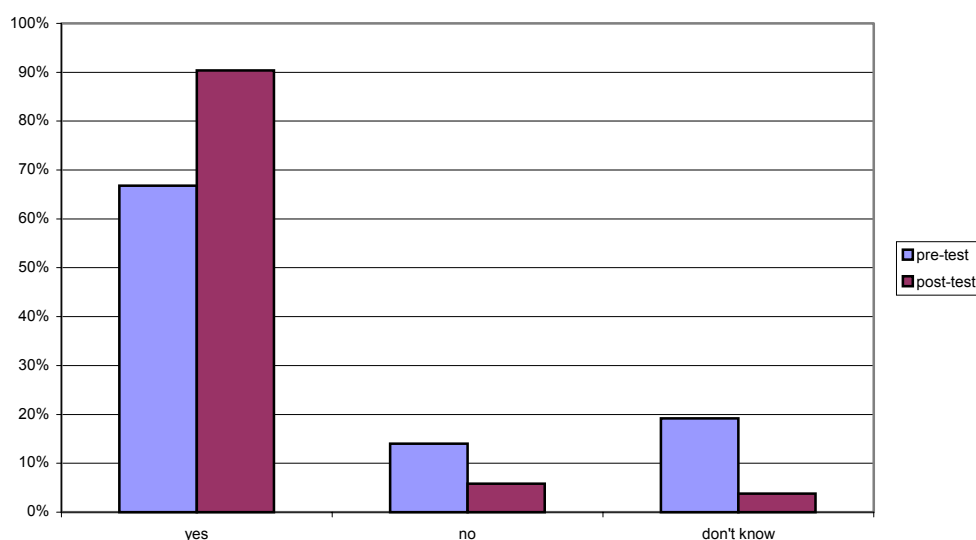
Table 1: Number of Respondents

Pre-test Sample Size	Post-test Sample Size
229	292

B. Key Findings

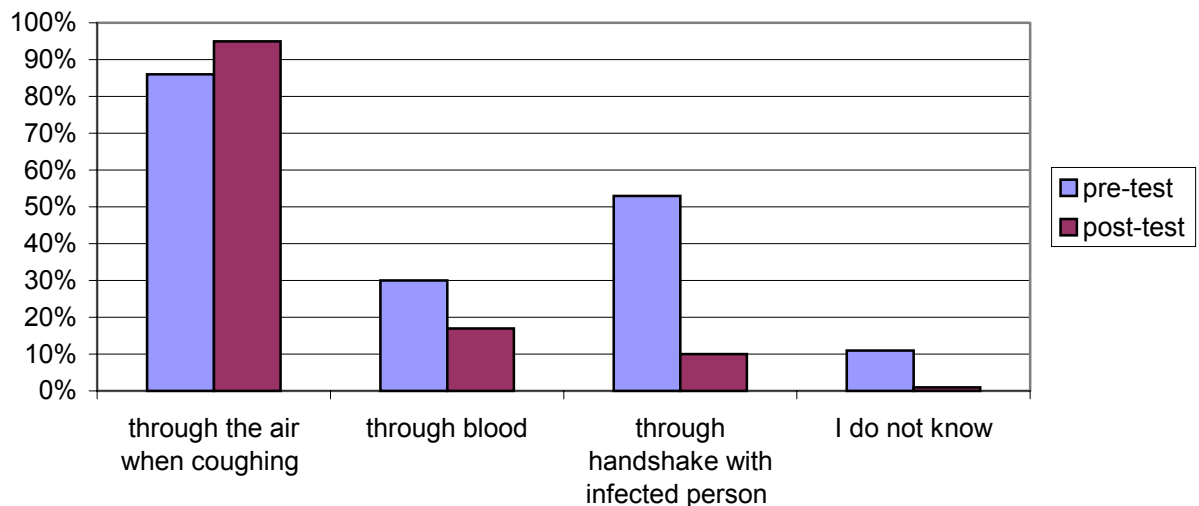
One of the survey's objectives was to define the attitude of the population towards the problem of TB. According to the pre and post surveys, 100 percent of the population was aware of what TB is. Almost a quarter of respondents had relatives and friends with TB (21.4% before campaign and 19.5% after). These findings confirm the urgency of the problem and its wide prevalence.

Percentage of Respondents Identifying TB as Curable if Treated Correctly and in Time



In the course of the action it was emphasized that TB is curable when properly and timely treated. After the campaign the percentage of respondents who believed that TB is curable increased by 23 percent. Simultaneously, the percentage of “don’t know” answers decreased.

Percentage of Respondents Identifying Correctly that TB is Transmitted Through the Air



It was revealed that the population did not identify clearly with the main ways in which TB can be transmitted. Almost half of the respondents before the campaign (52.8%) thought that TB could be transmitted by a handshake. After the campaign the number of such answers decreased to 9.6 percent.

After the campaign the majority of respondents - 94.9 percent - reported correctly that TB is transmitted through the air.

Although respondents correctly identified the methods through which TB is transmitted, only 34.6 percent before and 42.6 percent post campaign gave an affirmative answer when asked whether they would take a relative back home for after-care. It appears that the population does not understand clearly that after completion of hospital treatment the TB patient is no longer a potential threat because he does not excrete bacilli.

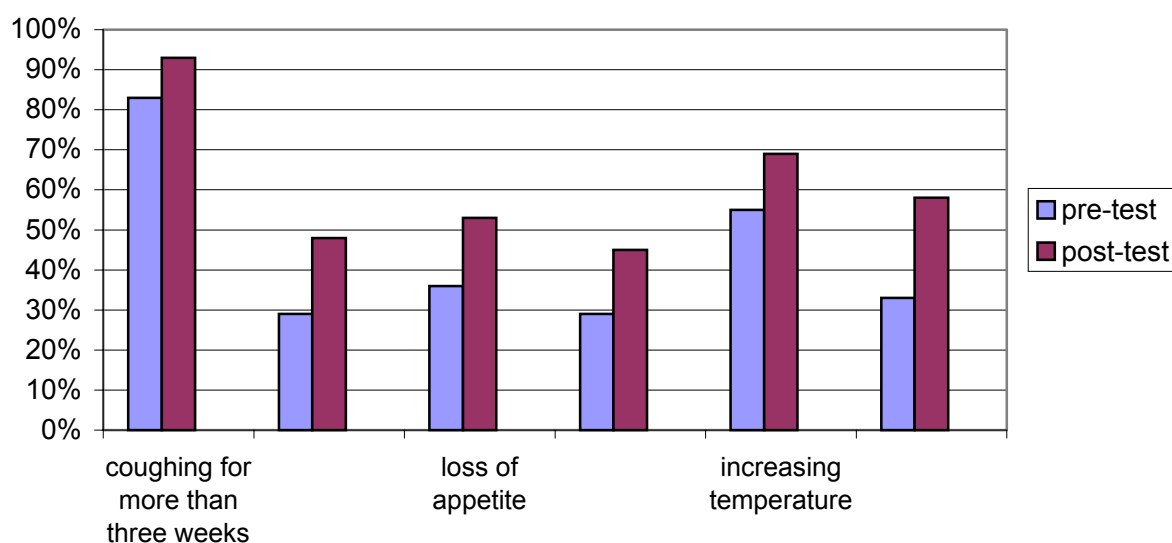
A further objective of the campaign was to educate the population properly about the main symptoms of TB, such as:

- Coughing for more than three weeks
- Exhaustion
- Loss of appetite and weight
- Periodical increases of temperature
- Sweating at night

These symptoms require the immediate care of a physician.

The results of the surveys show that knowledge about each of the symptoms did improve (see diagram below). It is encouraging to note that the percentage of respondents who identified that coughing with sputum is a symptom of TB was 1.4% less after the campaign.

Percentage of Respondents Identifying TB Symptoms Emphasized in the Course of the Campaign



When asked what health facility a patient would use should they suspect TB, 11.8 percent of teenagers pre, and 8.2 percent post, campaign said they would go to the FGP. This is probably due to the fact that there is only FGP (“Demeu”) but that it enjoys the confidence of the population enrolled in it.

C. Conclusions

Overall, the “TB Can Be Eradicated” Campaign in Astana was viewed successfully. There were increases of knowledge in all areas measured by the Kazakhstan Health Promotion Team. The proportion of respondents understanding that TB is curable if caught in time and correctly treated increased almost threefold. The proportion of respondents who understood the main symptoms of TB correctly and understood that once diagnosed they should immediately refer to a physician increased too. It is hoped that this increase in knowledge will serve to equip the population to be aware of the initial symptoms of TB, and to refer to physicians immediately, since early TB examination and treatment increase the chances of full recovery.

There were many factors that contributed to the overall success of the campaign including:

- Joint educational activities conducted by the National anti-TB Center and the National Healthy Lifestyle Center in all regions of the Republic. The survey showed that almost two third of respondents had learnt new information during the two months of the campaign.
- Using various channels of information dissemination (i.e. radio, video, and especially print material) is highly effective. 78.9% of respondents and 67.1% noted brochures and flyers as sources of information. These figures demonstrate the efficiency of the printed materials produced before the campaign by the above-mentioned institutions and sponsored by the World Bank. Also almost half of respondents received information about TB in the newspapers - 48.9% after the campaign against 13.3% before the campaign.
- Community events related to the Medical academy and the Medical college students’ contests were ideal for providing printed materials about the key topics of the campaign to the public;
- Since Astana is an urban area with high literacy rates, written materials were an effective medium for communicating the key messages of the campaign.

D. Recommendations

As a result of the Astana campaign there were many lessons learned on how the campaign could be enhanced to further communicate the key concepts of the campaign to the population.

Key Concepts:

- The survey revealed that prior to the campaign the population knew the main symptoms of TB, but did not pay attention to continuous coughing with sputum. It is necessary to focus the population's attention clearly on the fact that coughing for over three weeks with sputum is a symptom of TB.
- It is important to provide explanations about how TB can be cured, so that people who diagnose themselves as having the symptoms of TB will refer to a physician as early as possible. The results showed that direct information on this topic is very effective and can positively influence the attitude of the population towards TB and lead to early diagnosis of the disease.
- In future while conducting information campaigns on TB the population should be informed more clearly about where to go to get medical services should they display signs of TB. The pre-test revealed that almost half of the respondents (48%) answered that this facility should be a hospital. This issue was not emphasized in the course of the campaign and results of the survey showed that the term "health facility" is understood differently by different people (hospitals, dispensaries, polyclinics, FGPs etc.). The population needs to be more clearly informed as to what a PHC facility is and to which physician they should refer in case of TB symptoms.

Materials:

- The campaign confirmed that flyers and posters are popular and informative materials for disseminating information. They were distributed door to door and were available at FGPs. According to the post-survey the majority of people received information from these written materials. ZdravPlus plans to develop re-editions of printed materials on TB for other campaigns.
- Information dissemination among teenagers through audio-plays was judged to be stimulating. Writing compositions in schools meant that teenagers absorbed the information in interesting and unusual ways.
- Organizing mass events (for example the sports day) was viewed as an efficient method of attracting the attention of teenagers and the general public to the main topic.
- While conducting such campaigns, especially those connected with teenagers, a clear coordination of activities for all parties involved (akimats, education, health and sport departments) is required.
- ZdravPlus recognizes that the messages contained in this campaign should continue to be reinforced within the community for greater impact on knowledge and behavior. Materials dissemination can be achieved in school time through airing of audio-plays, writing compositions, and distribution of brochures via the FGP, other health facilities, shops and pharmacies.

Attachment 1: Questionnaire

Hello, my name is _____. I represent ZdravPlus Project/USAID who are conducting the information campaign "TB Can Be Eradicated!" Please answer the survey questions. It will not take more than ten minutes. Please be open and frank with your answers. The survey is confidential and your names will not be published in any material. Your replies will help us to assess the results of the campaign and to actively improve further campaigns.

Notice for interviewers:

If the answer to the first question is no, do not continue - go to the next respondent.

In cases of multiple choice, present the respondent with all possible choices.

Several answers are possible in questions 2,4,5,9, and 11.

1. Have you heard about the disease called TB?
☐ Yes ☐ No
2. How is TB transmitted?
☐ Through the air when coughing
☐ Through blood
☐ Through handshake with an infected person
☐ Sexually transmitted
☐ Other _____
☐ I don't know
3. Do you think TB is curable?
☐ Yes ☐ No ☐ I don't know
4. What symptoms can show that a person has TB?
☐ Coughing with sputum
☐ Coughing for over three weeks
☐ Periodical increases of temperature
☐ Blood in sputum
☐ Loss of appetite
☐ Night sweating
☐ Pain in the chest
☐ Total weakness
☐ Weight loss
☐ Inertia
☐ Other _____
☐ I do not know
5. Which symptoms would make you go to a health facility to have a TB test?
☐ Coughing with sputum
☐ Coughing for over three weeks
☐ Periodical increases of temperature
☐ Blood in sputum
☐ Loss of appetite
☐ Night sweating
☐ Pain in the chest
☐ Total weakness
☐ Weight loss
☐ Inertia

- ☐ Other _____
- ☐ I do not know

6. A sick relative has ended their TB treatment in a hospital. Would you take him back home for after-care?

- ☐ Yes ☐ No ☐ I do not know

7. Have you or your relatives ever had TB?

- ☐ Yes ☐ No ☐ I do not know

8. Have you ever had a friend, neighbor, or schoolmate with TB?

- ☐ Yes ☐ No ☐ I do not know

9. If you had TB signs where would you go to get medical service?

- ☐ Hospital
- ☐ Polyclinic
- ☐ FGP
- ☐ TB dispensary
- ☐ Pharmacy
- ☐ Other
- ☐ I do not know

10. Have you received any new information about TB in the last two months? (If answer is “yes” go to question 11, if answer is “no” – go to question 12.)

- ☐ Yes ☐ No

11. If “yes”, from which sources?

- ☐ Friends, acquaintances, relatives
- ☐ FGP workers
- ☐ Other medical workers
- ☐ Newspapers
- ☐ Radios
- ☐ TV
- ☐ Booklets, leaflets
- ☐ Lectures
- ☐ Other _____

12. Gender

- Male ☐ Female ☐

13. Year of birth 19 ____

Attachment 2: Data Tables by Question

Awareness

Question 1: Percentage of respondents identifying TB

Option	Pre-Campaign N=229	Post-Campaign N=292
Yes	100%	100%
No	0%	0%

Question 2: Percentage of respondents identifying methods of TB transmission

Option	Pre-Campaign N=229	Post-Campaign N=292
I do not know	10.9%	1.7%
By air & cough	85.6%	94.9%
Through blood	30.1%	17.5%
By handshake with TB patient	52.8%	9.6%
By sex	6.1%	9.9%
Others	7.9%	5.5%

Question 3: Percentage of respondents identifying TB as curable disease

Option	Pre-Campaign N=229	Post-Campaign N=292
Yes	66.8%	90.4%
No	14%	5.8%
I do not know	19.2%	3.8%

Question 4: Percentage of respondents identifying symptoms of TB patient

Options	Pre-Campaign N=229	Post-Campaign N=292
Cough with sputum	73.4%	49.7%
Cough more than 3 weeks	93%	83.2%
Temperature	69.9%	55.5%
Blood in sputum	43.2%	34.9%
Loss appetite	36.7%	52.7%
Night sweating	32.8%	57.9%
Pain in chest	23.6%	31.8%
Weakness	29.7%	47.6%
Loss weight	29.3%	45.2%
Inertia	27.5%	32.5%
Others	5.7%	2.7%
I do not know	0.4%	1.7%

Question 5: Percentage of respondents identifying symptoms leading them to have TB test

Options	Pre-Campaign N=229	Post-Campaign N=292
Cough with sputum	69.4%	43.2%
Cough more than 3 weeks	92.6%	82.5%
Temperature	70.3%	54.8%
Blood in sputum	43.7%	37.3%
Loss appetite	31.9%	42.8%

Night sweating	29.3%	51.7%
Pain in chest	27.1%	34.6%
Weakness	31.4%	45.9%
Loss weight	28.8%	36.6%
Inertia	26.2%	24.7%
Others	6.1%	2.4%
I do not know	0.4%	1.7%

Question 6: Percentage of respondents who would take their TB relative home for recovery after completed inpatient TB treatment

Options	Pre-Campaign N=229	Post-Campaign N=292
Yes	42.4%	34.6%
No	34.9%	40.8%
I do not know	22.7%	24.7%

Question 7: Percentage of respondents who have relative with TB

Options	Pre-Campaign N=229	Post-Campaign N=292
Yes	10.9%	12%
No	84.3%	80.1%
I do not know	4.8%	7.9%

Question 8: Percentage of respondents who have neighbor, classmate, friend with TB

Options	Pre-Campaign N=229	Post-Campaign N=292
Yes	12.7%	12%
No	61.1%	73.3%
I do not know	26.2%	14.7%

Referral

Question 9: Percentage of respondents referring to FGP

Options	Pre-Campaign N=229	Post-Campaign N=292
FGP	11.8%	8.2%
Policlinic	48.9%	30.8%
Hospital	48%	39.4%
Pharmacists	0%	0.3%
TB dispenser	32.3%	45.2%

Source of Information

Question 10: Percentage of respondents who received new information related to TB during the last two months

	Pre-Campaign N=229	Post-Campaign N=292
	75.6%	78.1%

Question 11: Percentage of respondents who received new information from different sources

	Pre-Campaign N=86	Post-Campaign N=186
FGP	24.4%	30.6%
Relatives	63.3%	10.5%
Other health workers	12.8%	30.3%
Newspapers	13.3%	48.9%
Radio	16.7%	27.2%
Television	13.9%	37.3%
Lectures	49.4%	42.5%
Brochures, flyers and posters	78.9%	67.1%